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[57] **ABSTRACT**

A graphic input device is described which has uniform sensitivity and is free from keystone distortion. The device includes a triangular prism with one face thereof defining the drawing surface. A camera is mounted on the other side of the drawing surface in a manner to capture light rays which have been totally internally reflected from the drawing surface. A collimating lens is mounted between the prism and the camera and is oriented such that its focal point is coincident with the camera's viewpoint and its principal surface is normal to the camera's optical axis. By placing the camera's viewpoint at the focal point of the collimator, the principal image forming rays will all be parallel within the transparent material. Thus they will intersect the drawing surface in equal angles, providing equal sensitivity everywhere. By making the optical axis of the camera normal to the principal surface of the collimator, these rays will all be made to traverse equal distances while converging towards the viewpoint. Thus keystone distortion is prevented.

[51] **Int. Cl.<sup>5</sup>** ..... **H04N 7/18**

[52] U.S. Cl. .... 358/93; 358/225;  
358/209

[58] **Field of Search** ..... 358/93, 81, 225, 226,  
358/217, 250; 359/636, 637, 638, 640

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**6 Claims, 1 Drawing Sheet**

